

# Laboratory Analysis Report

Total Number of Pages: 8

Job ID : 19060125



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, <http://www.ablabs.com>

---

## Client Project Name : ITC-DP - Outfall 002

<b>Report To :</b>	Client Name:	Intercontinental Terminal Company	P.O.#.: 370468
	Attn:	Tyler Blankenship	Sample Collected By:
	Client Address:	P. O. Box 698	Date Collected: 06/03/19 - 06/04/19
	City, State, Zip:	Deer Park , TX, 77536	

---

### A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
WW-20190603-002-Day 28	Water	19060125.01
WW-20190604-002-Day 29	Water	19060125.02

A handwritten signature in black ink, appearing to read 'S. C. LK.'.

Released By: Senthilkumar Sevukan  
Title: Assistant Lab Manager  
Date: 6/5/2019

---



This Laboratory is NELAP ( T104704213-19-20) accredited. Effective: 04/01/2019; Expires: 3/31/2020

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

---

Date Received : 06/04/2019 15:41

# LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID : 19060125

Date: 6/5/2019

## General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count
J	Estimation. Below calibration range but above MDL		

## Qualifier Definition

**LABORATORY TEST RESULTS**

Job ID : 19060125

Date 6/5/2019

Client Name: Intercontinental Terminal Company

Attn: Tyler Blankenship

Project Name: ITC-DP - Outfall 002

Client Sample ID: WW-20190603-002-Day 28

Job Sample ID: 19060125.01

Date Collected: 06/03/19

Sample Matrix Water

Time Collected: 10:00

% Moisture

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	SDL	MQL	Q	Date Time	Analyst
SM 4500CN-CG	Cyanide, Amenable Ultra Low								
	Cyanide, Amenable	<0.001	mg/L	1	0.001	0.002		06/05/19 14:00	LEB

**LABORATORY TEST RESULTS**

Job ID : 19060125

Date 6/5/2019

Client Name: Intercontinental Terminal Company

Attn: Tyler Blankenship

Project Name: ITC-DP - Outfall 002

Client Sample ID: WW-20190604-002-Day 29

Job Sample ID: 19060125.02

Date Collected: 06/04/19

Sample Matrix Water

Time Collected: 10:00

% Moisture

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	SDL	MQL	Q	Date Time	Analyst
EPA 300.0	Anions								
	Ortho Phosphate-P	<0.03	mg/L	1	0.03	0.1		06/04/19 19:50	RR

# QUALITY CONTROL CERTIFICATE



**Job ID :** 19060125

**Date :** 6/5/2019

<b>Analysis :</b> Anions	<b>Method :</b> EPA 300.0	<b>Reporting Units :</b> mg/L
<b>QC Batch ID :</b> Qb19060512	<b>Created Date :</b> 06/04/19	<b>Created By :</b> RRaval
<b>Samples in This QC Batch :</b> 19060125.02		
<b>Sample Preparation :</b> PB19060509	<b>Prep Method :</b> EPA 300.0	<b>Prep Date :</b> 06/04/19 13:00 <b>Prep By :</b> RRaval

QC Type: Method Blank								
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Ortho Phosphate-P		< MDL	mg/L	1	0.1	0.03		

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ortho Phosphate-P	1	0.964	96.4	1	0.980	98	1.7	20	90-110	

QC Type: MS and MSD											
QC Sample ID: 19060098.01											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Nitrite-N	BRL	10	10.0	100						80-120	
Nitrate-N	BRL	10	10.2	102						80-120	
Ortho Phosphate-P	BRL	10	11.6	116						80-120	

# QUALITY CONTROL CERTIFICATE



**Job ID :** 19060125

**Date :** 6/5/2019

<b>Analysis :</b> Cyanide, Amenable Ultra Low	<b>Method :</b> SM 4500CN-CG	<b>Reporting Units :</b> mg/L
<b>QC Batch ID :</b> Qb19060577	<b>Created Date :</b> 06/05/19	<b>Created By :</b> LEBell
<b>Samples in This QC Batch :</b> 19060125.01		
<b>Sample Preparation :</b> PB19060543	<b>Prep Method :</b> SM 4500CN-CG	<b>Prep Date :</b> 06/05/19 11:15 <b>Prep By :</b> LEBell

<b>QC Type: Method Blank</b>								
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Cyanide, Amenable	57-12-5	< MDL	mg/L	1	0.002	0.001		

<b>QC Type: Duplicate</b>								
<b>QC Sample ID: 19060125.01</b>								
Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit			Qual
Cyanide, Amenable	BRL	BRL		0	20			

<b>QC Type: LCS and LCSD</b>										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Cyanide, Amenable	0.02	0.0202	101	0.02	0.0203	102			80-120	

<b>QC Type: MS and MSD</b>											
<b>QC Sample ID: 19060125.01</b>											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Cyanide, Amenable	BRL	0.02	BRL							80-120	





## Sample Condition Checklist

A&B JobID : <b>19060125</b>	Date Received : <b>06/04/2019</b>	Time Received : <b>3:41PM</b>
Client Name : <b>Intercontinental Terminal Company</b>		
Temperature : <b>0.9-0.5cf=0.4°C</b>	Sample pH : <b>&gt;12 CN</b>	
Thermometer ID : <b>1707629</b>	pH Paper ID : <b>72375</b>	

  

	Check Points	Yes	No	N/A																								
1.	Cooler seal present and signed.		X																									
2.	Sample(s) in a cooler.	X																										
3.	If yes, ice in cooler.	X																										
4.	Sample(s) received with chain-of-custody.	X																										
5.	C-O-C signed and dated.	X																										
6.	Sample(s) received with signed sample custody seal.		X																									
7.	Sample containers arrived intact. (If no comment).	X																										
8.	<table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">Matrix</td> <td style="width: 10%;">Water</td> <td style="width: 10%;">Soil</td> <td style="width: 10%;">Liquid</td> <td style="width: 10%;">Sludge</td> <td style="width: 10%;">Solid</td> <td style="width: 10%;">Cassette</td> <td style="width: 10%;">Tube</td> <td style="width: 10%;">Bulk</td> <td style="width: 10%;">Badge</td> <td style="width: 10%;">Food</td> <td style="width: 10%;">Other</td> </tr> <tr> <td>:</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other																	
:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
9.	Sample(s) were received in appropriate container(s).	X																										
10.	Sample(s) were received with proper preservative	X																										
11.	All samples were logged or labeled.	X																										
12.	Sample ID labels match C-O-C ID's	X																										
13.	Bottle count on C-O-C matches bottles found.	X																										
14.	Sample volume is sufficient for analyses requested.	X																										
15.	Samples were received within the hold time.	X																										
16.	VOA vials completely filled.			X																								
17.	Sample accepted.	X																										
18.	Has client been contacted about sub-out			X																								

**Comments : Include actions taken to resolve discrepancies/problem:**  
 CN: NaOH+Thio.

Received by : AArnett

Check in by/date : AArnett / 06/04/2019